

XIX. *Notes on Endomychid Coleoptera and descriptions of new species in the British Museum.* By GILBERT J. ARROW, F.E.S., F.Z.S.

[Read October 18th, 1922.]

HAVING had the opportunity of examining the collection of Endomychidae, formed by H. S. Gorham between the years 1888 and 1901, and recently acquired by M. René Oberthür, I have made a few synonymical notes, which are here published. The first collection, containing the species described by Gorham previous to 1888, and including types of Guérin and many described by Gerstaecker from the Deyrolle collection, has long been incorporated in the British Museum.

In the deplorable "scraps" so fittingly called by him *Mélanges Exotico-Entomologiques*, M. Pic has lately bestowed names in his characteristic manner upon some of the most familiar representatives of this family. I have therefore indicated here the species to which these names are to be relegated. It seems to me very desirable that some representative body should give formal expression to the censure universally felt to be merited by this writer, who hinders the advancement and degrades the standards of Entomology by the wholesale introduction of names accompanied only by remarks indicating the most impudently superficial study.

Finally descriptions of various new species supplementing those described by me in *Trans. Ent. Soc. Lond.*, 1920 (p. 1) are included here. When engaged upon that paper I deferred dealing with the genus *Saula*, the minute species composing it bearing so close a general resemblance that satisfactory conclusions could not be arrived at without a study of considerable series. I have since succeeded in bringing together more than one hundred and fifty specimens of the genus, a large part of them collected by Prof. C. F. Baker, and this fine series has enabled the distribution and characteristics of a previously little-known genus to be elucidated and the number of its species is now more than trebled.

*Amphisternus papulatus* Gorh. is *A. bellicosus* Gerst.

TRANS. ENT. SOC. LOND. 1922.—PARTS III, IV. (FEB. '23)

*A. cultratus* Gorh. is based upon a specimen of *A. mucronatus* Gerst., in which, owing to its dirty condition, only one subapical spot is distinctly visible.

*Trycherus lateralis* Pic seems to be *T. longanimis* Thoms.

*Ancylopus lineatus* Pic is *Indalmus bivittatus* Perch.

*A. grandis* Pic is *I. ephippiatus* Gerst.

*A. atricornis* Pic is *I. kirbyanus* Latr.

The Burmese specimens referred to *Indalmus angusticollis* Gerst., by Gorham in Ann. Mus. Civ. Genova, xxxvi, 1896, p. 295, belong to another species, which I describe later as *I. distinctus*.

*Pedanus Gerstaeckeri* Gorh. is *P. quadrilunatus* Gerst.

The type of *Mycetina erubescens* Gorh. from Borneo (described in 1901, not 1902, as stated in Cziki's Catalogue), proves to be *Dryadites borneensis* Friv., as I anticipated in my paper just referred to.

*M. brevicollis* Gorh. was described from examples of two species mounted on a single card. The one Gorham mentioned as perhaps the female is quite distinct.

*Trochoideus rouyeri* Pic is the very common and variable *T. Desjardinsi* Guer., and *T. particularis* Pic is evidently a female specimen of the same insect.

The generic name *Lycoperdinella* introduced in my paper having been previously used by Mr. Champion, I propose to substitute *Lycoperdinodes* in its stead.

*Stenotarsoides alfieri* is "described" by M. Pic from "Indes" and compared with "*medianus*" Gorh. As there is no *medianus*, he probably means *Stenotarsus indianus* Gorh., a very widely-distributed species, of which the type is in the British Museum. I have little doubt that this is M. Pic's *Stenotarsoides alfieri*.

#### *Indalmus distinctus*, sp. n.

Black and shining, each elytron decorated with two bright yellow patches of rather indefinite and irregular outline, the first subquadrate, placed just behind the base and touching the lateral margin, with its outer edge excised by a small black spot at the humeral angle, the second transversely oval, placed before the apex and equidistant from the inner and outer margins.

It is rather narrowly oblong in shape. The head is finely punctured, the pronotum more strongly, its sides bisinuate, the front and hind angles rather acutely produced, the base deeply margined and the lateral foveae not quite reaching the middle. The scutellum is short and very transverse. The elytra are fairly closely and

strongly punctured, with the shoulders not prominent and the sides narrowly margined. The prosternum is very narrow between the coxae, the mesosternum bears a carina shaped like an inverted Y, enclosing a rounded tubercle between its arms, and the metasternum is smooth and shining. The abdomen is finely punctured. The antennae are rather slender, the first and third joints as long as the fourth and fifth together and the last three forming a narrow club, the ninth a little longer and the tenth a little shorter than wide, the last obliquely truncate.

♂. The front tibia is armed with a very strong oblique tooth at the middle of its inner edge, the middle tibia has a short tooth just before the middle and is strongly curved from there to the extremity. The fifth ventral segment has a curvilinear emargination.

♀. The front tibiae are straight, the middle ones distinctly and the hind ones feebly, curved in their posterior half.

Length 7-8 mm.; breadth 3-4 mm.

BURMA: Toungoo (*G. Q. Corbett*), Karen Hills, Cheba, 27,000-33,000 ft. (*L. Fca*). ASSAM: Khasi Hills, Nongpow, Silhet, Chandkhira.

Type in the British Museum; co-types in the Genoa Museum and in Mr. O. E. Janson's collection.

Gorham confused this species with *I. angusticollis* Gerst., the males of which have a long slender tooth upon the middle tibia, placed at a third of its length. In the present insect the tooth is very short, though obvious, and is placed near the middle. The emargination of the end of the abdomen in the same sex is not angular, as in Gerstaecker's species.

#### *Pseudindalmus malayensis*, sp. n.

Obscure rufus, elytris nigris, singulo rufo-bimaculato, maculis sat magnis, anteriori paulo pone basin sita, ad humerum et marginem externum attingenti, posteriori anteapicali, subtriangulari.

Ovalis, parum convexus, nitidus, corpore supra perspicue sat aequaliter punctato, oculis prominentibus, remotis, pronoto lateraliter intra margines paulo excavato, his antice fortiter arcuatis, posticis fere rectis, basi recto, sulco profundo, medio fossulato, foveis basalibus profundis, rectis, fere ad medium attingentibus, scutello semicirculari; elytrorum lateribus perspicue deplanatis; antennis brevibus, articulo tertio quam secundo perpaulo longiori; pro- et meso-sterno angustis:

♂, antennarum articulo 9° valde inflato, tibia intermedia laevissime incurvata.

Long. 5 mm.; lat. 3 mm.

MALAY PENINSULA: Singapore (*C. J. Saunders*).

In size and general appearance this species and *P. borneensis* Arrow are almost identical. The coloration is the same, except that the legs and club of the antenna are red and the anterior elytral patch extends to the outer margin and reaches the shoulder. The pronotum and elytra are much more distinctly punctured, the eyes are smaller and farther apart, the base of the pronotum is rectilinear, the sides more strongly excavated within the lateral margins, the basal foveae very deep and the basal groove has a round impression in the middle. The flattened outer margins of the elytra are a little wider than in the allied form.

The type of *P. borneensis* is not, as I supposed, a male. Mr. Saunders has taken a male specimen in Singapore which I believe to be that of this species and which has the ninth joint of the antenna much swollen and the hind tibia dilated posteriorly. The latter forms the best-marked distinction between the two species.

#### *Beccaria 12-punctata*, sp. n.

Nigra, parum nitida, pronoti angulis anticis elytrique singuli punctis rotundatis 12 rufis, quarum una basali, duo medianis, et duo subapicalibus, antennis flavis, clava nigra; fere hemisphaerica, convexa, pronoto haud latissimo, minute et crebre punctato, lateribus arcuatis, angulis omnibus fere rectis, basi trisinuato, anguste marginato, foveis basalibus minutis; scutello triangulari, fere laevi; elytris fortiter aequaliter sat crebre punctatis; metasterni medio fortiter haud crebre punctato; antennarum articulis basalibus parvis, 4-7 brevissimis, tribus ultimis sat magnis.

Long 5.5 mm.; lat, 4.5 mm.

BORNEO (*Prof. A. C. Haddon*).

The unique type specimen has been surrendered by the Cambridge University Museum to the British Museum.

It is a species easily distinguished from all others by the close puncturation of the upper surface and the more numerous red spots with which it is decorated. It most resembles *B. philippinica* Arrow, but the elytra have ten round spots instead of seven. It is a little larger, the pronotum is relatively narrower and the antennae are less slender, the club larger and almost equal in length to the footstalk, of which joints four to seven are extremely short.

*Beccaria cruciata*, sp. n.

Fulva, antennarum clava elytrorumque margine toto, sutura et linea mediana recta nigris: fere hemisphaerica, nitida, sat convexa, pronoto laevissime et disperse punctato, parum convexo, marginibus lateralibus fere rectis, antice leviter arcuatis, angulis anticis rotundatis, basi trisinuato, subtiliter marginato, elytris fortiter haud crebre aut regulariter punctatis; metasterni medio abdominisque basi grosse haud dense punctato; antennis gracilibus, articulis 1-8 elongatis.

Long. 4 mm.; lat. 3 mm.

PHILIPPINE IS., Mindanao: Surigao (*Prof. C. F. Baker*).

This is very similar to the Bornean *B. coccinella* Arrow, but the colouring is much brighter, and the four elytral patches are enlarged so that the interposed black areas appear to form a narrow black cross. The pronotum and scutellum are entirely pale and the elytral patches roughly triangular in shape, the anterior one very feebly indented at the shoulder. The pronotum is rather more finely punctured than that of *B. coccinella*, its front angles are blunter and the base is finely margined, the elytra are less highly convex and the antennae are longer, the first eight joints being distinctly elongate and the total length greater than the width of the pronotum at its base.

*Beccaria pallida*, sp. n.

Pallide testacea, antennarum clava elytrorumque margine angusto nigris, hujus parte posticali paulo dilatata, angulis extremis pallidis; fere hemisphaerica, supra nitida, pronoto lato, laevissime punctato, angulis anticis productis, haud acutis, posticis acutis; elytris distincte sed disperse punctatis; antennis brevissimis, gracilibus, articulo tertio longo.

Long. 5.5 mm.; lat. 4.5 mm.

N. MALABAR: Taliparamba (*P. S. Nathan*, July-Aug.).

This is also unique, the type having been received from Mr. E. Ballard.

Pale testaceous yellow, with the last four or five joints of the antennae and a narrow border encircling the conjoined elytra black. This border does not include the scutellum, but extends a little way down the suture behind it, and at the posterior end of the elytra it dilates into a broad subapical patch, the extreme apices being pale.

The body is very broadly oval, almost hemispherical,

and very smooth and shining above, the puncturation being fine and sparse. The head is finely pubescent, the pronotum very broad, lightly punctured, with its sides straight and very divergent behind, feebly rounded in front, the front angles produced but not very sharp, the hind angles rather acute, the base feebly trisinuated, not distinctly margined, the lateral foveae well marked. The elytra are distinctly but sparingly and unevenly punctured. The lower surface is clothed with fine silky hair, and the metasternum has in the middle a large cluster of coarse, evenly distributed punctures. The antennae are very slender but relatively very short, the length being considerably less than the width of the pronotum at the base. The third joint is decidedly longer than the rest.

*Beccaria ovata*, sp. n.

Nigra, nitida, singulo clytro lunula humerali punctaque subapicali flavis ornato; ovata, convexa, pronoto parvo, sat crebre punctato, utrinque bifossulato, lateribus arcuatis, medio laevissime excisis, angulis posticis paulo productis, foveis basalibus linearibus, basi trisinuato, anguste marginato; clytris punctis magnis et parvis intermixtis inaequaliter sparsis, lateribus pone humeros leviter angulatis, apicibus paulo productis; pedibus modice longibus, antennis gracilibus, articulis 1-8 elongatis, 9 triangulari, 10 brevi, lato, 11 subquadrato.

Long. 8 mm.; lat. 6 mm.

PHILIPPINE IS., Mindanao: Iligan (*Prof. C. F. Baker*).

A single male specimen has been kindly presented to the British Museum by Prof. Baker.

A peculiar and isolated species in which the regularly rounded outline, producing in most of the forms so close a resemblance to Coccinellidae, is absent. The oval shape, with the slender antennae and legs (especially the hind ones) prevent such a resemblance in the present case. It is a shining black insect, with an orange half-ring upon each elytron, enclosing a black shoulder-spot, and a round orange spot before the apex. The abdomen is also pale except the basal segment. The pronotum is relatively small and much narrower than the conjoined elytra, finely margined all round, with the rounded outer margins a little interrupted in the middle and the lateral foveae linear. The curvature of the sides of the elytra is also a little irregular, a slight

angle being formed at the widest point; the puncturation is very irregular and the apices are produced.

This is the largest species of *Beccaria* known.

***Cyclotoma monticola*, sp. n.**

Bright red, with the club of the antenna and seven nearly equal and equidistant black spots upon each elytron black, three of the latter near the suture and four near the lateral margin.

Hemispherical in shape and extremely smooth and glossy. The clypeus is rather closely punctured, the forehead scantily, with a very thin, scarcely perceptible clothing of minute setae. The pronotum is very broad, the breadth equal to three times its length, finely punctured, with the lateral margins feebly rounded and all the angles obtuse. The elytra are finely and evenly punctured, with rather broad flattened lateral margins, broadly conjointly rounded behind and not at all produced. The metasternum is strongly punctured and the abdomen rather finely. The basal joint of the antenna is long, the second globular, the third and fourth slender, the fifth to eighth very short, the ninth to eleventh together as long as the seven preceding.

Length 6.5–7.5 mm.; breadth 6–7 mm.

S. INDIA: Nilgiri Hills, Anamalai Hills (*Andrews*), Kanara (*T. R. D. Bell*). Type in the British Museum.

This species has a much richer colour than its Indian congeners, and is also differently spotted and of more exactly hemispherical shape. It more closely resembles the Philippine *C. coccinellina* Gerst., from which it differs in its deeper colouring, broader prothorax (that of *C. coccinellina* is only two and a half times its length), less closely punctured and pubescent head and the longer first and third joints to the antenna.

***Stenotarsus perforatus*, sp. n.**

Flavus, antennarum articulis 7–10 nigris: ovalis, convexus, nitidus, ubique dense fulvo-setosus, pronoto brevi, lateribus antice valde arcuatis, postice fere parallelis, marginibus latis, basi fortiter marginato, utrinque intra marginem exciso, sulcis lateralibus valde obliquis, antice vix perspicue productis, scutello late transverso; elytris grosse seriatim punctatis, punctis post medium evanescentibus: antennis longitudine ad corporis dimidium aequalibus, articulis 2–8 brevissimis, 9–11 magnis, laxe connexis, 10 transverso, ultimo ovali, ad duos precedentes conjunctim vix aequali.

Long. 3.5 mm.; lat. 2 mm.

PHILIPPINE IS.

The unique specimen has been in the British Museum since 1845. It was probably captured by Cuming, like the three other species already recorded from the Philippine Islands. It is a smaller insect, of a bright yellow colour, except for the black intermediate joints of the antennae, probably varying in number, but leaving the terminal one pale, except at the base. It is more narrowly oval than the majority of Oriental *Stenotarsi*, and the elytra are very coarsely punctured in rows which disappear a little beyond the middle. The broad elevated margins of the pronotum project behind owing to the deep notching of the base at the end of the lateral grooves, which produces the effect of a perforation on each side when the thorax and elytra are closely applied.

*Chondria longicornis*, sp. n.

Ferruginea, antennis nigris, articulis duobus basalibus ferrugineis ultimoque laete flavo; late ovalis, modice convexa, parum dense aut longe pubescens, antennis pedibusque gracilibus, pronoto haud lato, nitido, lateribus antice leviter arcuatis, postice fere parallelis, marginibus latissimis, postice attenuatis, basi fortiter marginato, utrinque profunde excavato, elytris sat grosse seriato-punctatis, interstitiis minutissime parce punctatis; antennis quam corporem vix brevioribus, articulis 2-8 compactis, brevibus, tertio perpaulo longiori, tribus ultimis elongatis, laxe articulatis, ultimo longissimo.

Long. 3 mm.; lat. 2 mm.

PHILIPPINE IS., Mindanao: Surigao.

The unique type has been presented to the British Museum by *C. F. Baker*.

It is reddish-chestnut coloured, with the antennae black, except the two basal joints, which are red, and the last, which is bright yellow. Rather broadly oval, with very slender legs and antennae, and clothed with fine pubescence. The pronotum is rather feebly rounded in front, the lateral margins are broad, narrowed and very prominent behind, the base strongly margined and very deeply excavated at each end just within the raised margins, with the foveae situated within the basal groove and not produced forwards. The elytra bear longitudinal rows of large, not closely-set punctures. The antennae are little shorter than the body, joints two to eight very short and compact and the three last elongated, not flattened, very loosely articulated and equal in length to the preceding



seven, the yellow terminal joint three times as long as it is wide.

***Chondria apicalis*, sp. n.**

Testacea, fulvo-pubescens, pronoto medio paulo infusato, antennis nigris, articulis basalibus 4 vel 5 rufescentibus ultimoque pallide flavo; pedibus antennisque modice longis, pronoto brevi, subtiliter punctato, lateribus fortiter arcuatis, marginibus latissimis, basi fortiter sat anguste marginato, utrinque profunde fossulato, foveis basalibus valde obliquis, antice leviter productis, scutello lato, triangulari; elytris seriato-punctatis, interstitiis sat crebre punctulatis; antennarum articulis 2-8 brevibus, compactis, 9-11 laxissime connexis, paulo dilatatis, 9 et 10 transversis, 11 ad eos conjunctos longitudine aequali.

Long. 4 mm.; lat. 3 mm.

PHILIPPINE IS., Mindanao: Butuan (*C. F. Baker*).

Like all its eight congeners, this is known from a single specimen only. This has been kindly presented to the British Museum by Prof. Baker. It resembles *C. ovalis* Arrow, but is rather larger, with longer antennae, the interstices of the elytra more finely punctured and the large serial punctures more distinct. The elevated margins of the pronotum are wider, the basal groove more deeply impressed and less close to the edge. The deep pits passing under the raised margins at each end of the base form a remarkable feature, but they are a little less conspicuous than in *C. longicornis*.

The two Philippine species are peculiar for the pale terminal joint of the antenna. This is an interesting characteristic of the Endomychidae of several genera in the island of Mindanao. Gorham has described two species of *Stenotarsus* in which this curious feature occurs, viz. *S. tabidus* and *leoninus*. In the latter the last two joints are said to be pale, but in fully mature specimens the terminal one only seems to retain its yellow colour. I have here described a third Philippine *Stenotarsus* with the same characteristic, and it appears again in *Milichius ampliatus*, an Endomychid superficially like but not very nearly related to *Stenotarsus* and *Chondria*. It is evidently a case of a mimetic association, and the bright-tipped antenna may be assumed to be a warning mark.

*Stenotarsus tabidus* and *leoninus*, of Gorham, just referred to, are described as uniformly coloured, with the exception of the antennae, but a black-spotted form of each

occurs. In the former a black patch may appear in the middle of the pronotum and another in the middle of each elytron; in the latter a spot appears at the base and another near the middle of the outer margin of each elytron.

#### Genus SAULA.

The genus *Saula* seems to be the counterpart in the Oriental Region, to which it is confined, of the mainly African genus *Danae*, the species of which are closely similar, but have invariably a broader thorax, with wide raised margins. The two genera agree in exhibiting remarkable sexual differences in the legs and antennae. With the exception of these sexual features, there is a very close uniformity in size, colour and general appearance, in all the species of *Saula*.

A careful study of the considerable series I have succeeded in bringing together reveals that the genus is a very large one and that the most important and distinctive characters of the species are peculiar to the males. Five species have been named up to the present time, and in none of these has any sexual character been referred to. Although in some of the forms the two sexes are practically identical, in most the antennae of the males are longer or more massive and the tibiae of one or more pairs of legs are bent or dilated in various ways according to the species.

#### *Saula occidentalis*, sp. n.

Pallide testacea, antennis (basi excepto) infuscatis; robusta, parum convexa, griseo-pubescens, pronoto brevi, lato, plano, lateribus bisinuatis, angulis anticis paulo productis, obtusis, posticis acutis; elytrorum humeris prominentibus; antennis tenuibus, haud valde elongatis, articulo tertio longo, ultimo duplo longiori quam latiori.

Long. 4 mm.; lat. 2.5 mm.

BOMBAY: Bandra (*Dr. A. S. G. Jayakar*).

So far as known this species represents the farthest westward range of this Oriental genus.

It is straw-coloured, with the antennae (except the basal part) dark and the extremities of the femora and bases of the tibiae light brown.

The body is rather broad and not very convex, with a fairly close clothing of pale hair. The eyes are not large, separated by twice their radius. The pronotum is nearly

twice as wide as it is long and quite as wide in front as at the base. The front angles are a little produced as rounded lobes and have broad elevated margins which become very narrow at the sides. The lateral margins are gently bisinuated and the hind angles acute. The elytra are not very convex, broad at the base and not much dilated beyond it. The legs are long and slender and the tibiae straight and simple in both sexes. The antennae are slender but not very long, the third joint is distinctly longer than the second or fourth, and the terminal joint is nearly as long as the two preceding ones together.

The male has the antennae a little more slender than those of the female, and the last ventral segment (5th) is slightly pointed behind.

The female has the last ventral segment broader and not pointed.

*Saula oculata*, sp. n.

Testacea, annis (basi excepto) nigris tibiisque plus minusve infuscatis: elongato-ovalis, griseo-pubescentis, pronoto transverso, plano, angulis anticis obtusis, basi dilatato, angulis acutis; elytris convexis, postice attenuatis; annis gracilibus, articulis 1-7 paulo elongatis, ultimo duplo longiori quam latiori, oculis magnis, haud late separatis:

♂, annis gracilioribus, articulo ultimo quam latitudine plusquam duplo longiori, tibiis posticis apice leviter attenuatis.

Long. 3-5.4 mm.; lat. 2 mm.

BRIT. N. BORNEO: Sandakan (*C. S. Baker*). SARAWAK: Mt. Matang, Quop (*G. E. Bryant*, Dec.-April).

This is a larger species than *S. tibialis* and has markedly larger eyes, the interval separating the latter being little more than the diameter of the eye as seen from above. The pronotum is relatively broader at the base, and the elytra have the shoulders rather less rounded. The antennae are similar, but have usually only three instead of five basal joints pale, and the tibiae are more or less dark (although never black) except at the base. Pale specimens are found, however, in which no darkening is perceptible. The male has very slender antennae (Fig. 3), and the gradual increase in width of the hind tibia ceases at two-thirds of its length and a very slight diminution occurs.

*Saula tibialis*, sp. n.

Ferruginea, pedibus concoloribus, annarum dimidio apicalinigris; elongato-ovalis, breviter griseo-pubescentis, pronoto trans-

verso, minute sat crebre punctato, angulis haud productis, posticis acutis; elytris convexissimis, humeris parum prominentibus; antennis gracilibus, articulis 3-7 elongatis, ultimo quam precedenti duplo longiori:

♂, antennis gracilissimis, articulo ultimo duplo longiori quam latiori, pedum 4 anteriorum tibiis arcuatis.

Long. 3 mm.; lat. 2 mm.

BRIT. N. BORNEO: Sandakan (C. F. Baker). SARAWAK: Mt. Matang (G. E. Bryant, Dec.), Kuching (J. E. A. Lewis).

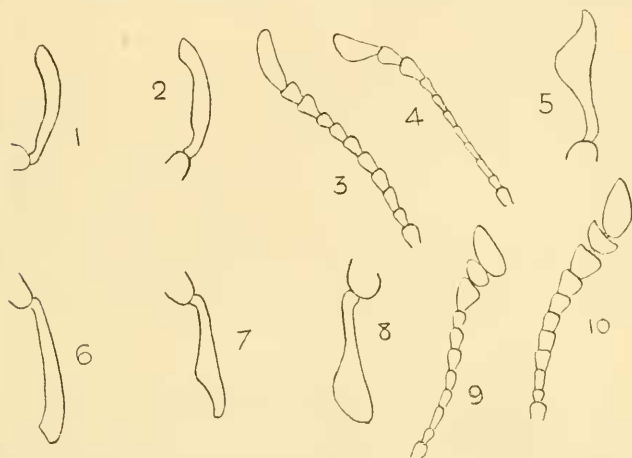


Fig. 1.—Front tibia of *Saula tibialis*, sp. n., male. 2. Front tibia of *S. curvipes*, sp. n., male. 3. Antenna of *S. oculata*, sp. n., male. 4. Antenna of *S. filicornis*, sp. n., male. 5. Front tibia of *S. crassicornis*, sp. n., male. 6. Hind tibia of *S. posticalis*, sp. n., male. 7. Hind tibia of *S. excisipes*, sp. n., male. 8. Hind tibia of *S. clavipes*, sp. n., male. 9. Antenna of *S. malleicornis*, sp. n., male. 10. Antenna of *S. crassicornis*, sp. n., male.

A small species closely resembling *S. curvipes* and *filicornis*, but with the legs and the basal half of the antennae pale. The elytra are rather shorter and more strongly narrowed behind. In the male the antennae are very slender, and the front tibiae are rather strongly, and the middle ones more gently, curved (Fig. 1).

#### *Saula filicornis*, sp. n.

Testacea, tibiis infuscatis (basi excepto) antennisque nigris (basi pallidiore); haud robusta, elongata, sat longe griseo-pubescentis,

oculis magnis; pronoto paulo transverso, plano, minute sat crebre punctato, lateribus postice parum sinuatis, margine antice recto, angulis anticis obtusis, haud productis, posticis acutis; elytrorum humeris parum prominentibus; pedibus modice gracilibus, antennis gracilissimis, articulis omnibus elongatis, clava laxe articulata, articulo ultimo quam precedenti plusquam duplo longiori, leviter arcuato:

♂, tibia antica valde, intermedia leviter, arcuata.

Long. 3.5 mm.; lat. 2 mm.

PHILIPPINE IS., Luzon: Los Banos; Mindanao: Surigao (*C. F. Baker*).

A small rather narrowly elongate species, with the eyes large and separated by less than twice their radius, the pronotum narrow, closely punctured, nearly straight at the front margin, the front angles blunt and not at all produced, the hind angles a little acute, the elytra highly convex, rather narrow at the shoulders and attenuated behind. The antennae are very long and slender, and the terminal joint is more than twice as long as it is wide (Fig. 4). In the male the front tibia is strongly curved.

#### *Saula curvipes*, sp. n.

Omnino testacea, antennis (basi excepto) nigris; elongato-ovata, griseo-pubescentis, pedibus antennisque sat longis, oculis parvis, late separatis; pronoto late transverso, subtiliter punctato, lateribus bisinuatis, angulis anticis parum productis, obtusis, posticis leviter acutis; elytris valde convexis, humeris parum prominentibus; antennarum articulis 1-8 (tertio excepto) sat brevibus, compactis, tribus ultimis laxè articulatis, elongatis, ultimo quam precedente fere duplo longiori:

♂, tibiis anticis arcuatis, intus medio et apice paulo dilatatis, trochanteribusque anticis spinosis.

Long. 3.5 mm.; lat. 2 mm.

PALAWAN I.: P. Princessa (*C. F. Baker*).

This closely resembles *S. filicornis*, but it is a little more stoutly built, with the legs entirely pale and rather less slender, and the antennae shorter. The pronotum is more transverse and less closely punctured, the three club-joints of the antenna are equally loosely conjoined, but rather less elongate and those of the footstalk are much stouter, the third alone being slightly elongate.

The front tibia of the male (Fig. 2) is rather strongly curved, dilated a little at the middle of its inner edge and again at the extremity, and the trochanter of the same leg is produced into a sharp point beneath.

**Saula clavipes, sp. n.**

Testacea, femorum apicibus, tibiis antennisque (basi excepto) nigris; elongata, modice nitida, griseo-pubescentis, pronoto transverso, minute sat crebre punctato, basi lato, angulis posticis acutis; elytrorum humeris parum prominentibus; antennis gracilissimis, articulis omnibus elongatis, ultimo quam precedente duplo longiori:

♂, femoribus posticis incrassatis, clavatis, leviter arcuatis, subtus antice apicem paulo excisis, tibiaram posticarum dimidio antico tenui, leviter sinuato, dimidio postico fortiter laminato-dilatato, abdominis segmento primo lato, 5 haud angusto. utrinque lobato, 6 fortiter lobato.

Long. 3.5 mm.; lat. 2 mm.

PHILIPPINE IS., N. Luzon: Baguio, Benguet (*C. F. Baker*).

Except in the features distinctive of the male, the resemblance between this and *S. flicornis* is extremely close. The antennae are very long and slender, all the joints elongate, the last three very loosely articulated and the terminal one twice as long as its predecessor. The thickened hind femora of the male, a little excised at the posterior edge, and the remarkable almost semicircular flange at the extremity of the tibia (Fig. 8) render the identification of that sex easy. The structure of the abdomen in the male is also remarkable. The fifth segment is broad and deeply excised in the middle, and the sixth consists of two lobes fringed with hair.

**S. excisipes, sp. n.**

Testacea, antennis (basi excepto) femorum dimidio apicali, tibiisque (basi excepto) nigris: elongata, sat dense griseo-pubescentis, oculis magnis, approximatis; pronoto transverso, parum convexo, angulis anticis obtusis, posticis fere rectis; elytris convexis, humeris parum prominentibus; antennis gracilibus, articulo ultimo quam precedenti duplo longiori:

♂, antennis gracilissimis, articulo ultimo quam latiori fere triplo longiori, tibia postica a basi ad post medium gradatim dilatata, deinde intus arcuatim angustata.

Long. 3.5 mm.; lat. 2 mm.

MALAY PENINSULA : Penang (*G. E. Bryant*, Oct.).

A single pair was taken by Mr. Bryant and presented by him to the British Museum.

This is a rather small species, with convex oval elytra and dark antennae and legs. It closely resembles *S. oculata* Arrow, and, like it, has large prominent eyes, but it is a little smaller, the pronotum is not quite so broad at the base, and the shoulders of the elytra are more rounded. The antennae are very slender, especially in the male, and the hind tibia of the male has a very peculiar form. It is straight, gradually increases in width from the base to two-thirds of its length and is then abruptly narrowed in a curve to the apex, appearing as though cut away at the inner edge (Fig. 7).

This or the next species may possibly be the *S. Biroi* of Csiki (from Malacca). Owing to an unfortunate accident having befallen the Latin phrase in which the coloration of the legs is referred to, it is impossible to determine what that coloration is, and nothing remains by which the identity of the insect may be guessed at.

#### *S. variipes*, sp. n.

Flava, antennis (basi excepto) femorum apicibus tibiarumque dimidio apicali nigris; elongato-ovalis, griseo-pubesceus, pronoto transverso, plano, lateribus leviter bisinuatis, angulis anticis obtusis, posticis paulo acutis, clytris convexis, haud abbreviatis, antennis sat gracilibus, articulo ultimo elongato, quam duobus praecedentibus conjunctim breviori :

♂, antennis paulo longioribus.

Long. 3.5-4 mm.; lat. 2 mm.

BRIT. N. BORNEO : Sandakan (*C. S. Baker*). SARAWAK : Quop, Lundu (*G. E. Bryant*, Jan., March). MALAY PENINSULA : Singapore (*C. S. Baker*).

This is distinguishable from all other known species by the coloration of the legs, both the femora and tibiae being yellow, with the terminal part black. The antennae are black, with the two basal joints pale. The eyes are rather smaller than those of *S. oculata*, the antennae not quite so slender, with a distinctly shorter terminal joint, the prothorax is shorter and broader, and the elytra are a little longer and less convex. The legs are similar in both sexes, but the antennae of the male are a little longer than those of the female and the fifth ventral segment is rather narrower.

*S. posticalis*, sp. n.

Testacea, pedibus concoloribus, antennis (basi excepto) nigris; elongata, griseo-pubescentis, pronoto transverso, haud dense punctato, angulis anticis paulo productis, posticis acutis, haud productis; elytris parum elongatis, humeris modice prominentibus; antennis gracilibus, articulis omnibus elongatis, ultimo quam latiori dimidio longiori:

♂, tibiis posticis arcuatis, postice paulo dilatatis.

Long. 3.5 mm.; lat. 2 mm.

TONKIN: Hoabinh (*R. Vitalis de Salvaza*, Aug.).

I have seen only a single male specimen of this insect, which resembles *S. tibialis*, but the antennae are black, with the exception of the two basal joints, the anterior angles of the pronotum are a little produced and rather broadly margined, and the elytra are a little less oval and convex. The antennae of the male are still more slender than in that sex of *S. tibialis*, all the joints being distinctly elongate, but the terminal joint is shorter and only half as long again as it is wide. The hind tibia in the same sex is curved and a little dilated posteriorly, instead of the front and middle tibiae, as in *S. tibialis* (Fig. 6).

*S. crassicornis*, sp. n.

Rufo-testacea, antennis (basi excepto) nigris; elongato-ovalis, griseo-pubescentis, pronoto transverso, convexo, minute sat crebre punctato, angulis posticis acutis, haud productis; elytrorum humeris parum prominentibus; antennis crassis, haud brevibus, articulo basali ovali, inflato, tertio et ultimo paulo elongatis, ceteris brevibus, 8-10 transversis:

♂, antennis crassioribus, planatis, tibiis anticis intus (basi excepto) fortiter deplanatis, tortis, margine interno apice valde reflexo, tibiis intermediis pone basin arcuatis.

Long. 3.5 mm.; lat. 2 mm.

PHILIPPINE IS., Bukidnon, Tanglecolan (*C. F. Baker*).

Prof. Baker has sent a single specimen of each sex.

The whole of the legs and the two basal joints of the antenna are of the same pale colour as the body, the remaining part of the antenna alone being black. The general form differs little from that of *S. curvipes*, but the pronotum is rather more convex. The antennae are very distinctive. They are rather stout and long, with the first, third and last joints only distinctly elongate, and



the eighth, ninth and tenth rather transverse. The terminal joint is pear-shaped. The antennae of the male are more massive than those of the female, and the front tibiae of the same sex are still more curiously formed (Figs. 5, 10). They are dilated internally from a little beyond the base and the broad flange strongly reflexed in its terminal part. The middle and hind tibiae are slender and the former rather strongly curved beyond the base.

**S. malleicornis, sp. n.**

Testacea, tibiis tarsisque fuscis, antennis nigris, articulis duabus basalibus pallidis exceptis; robusta, nitida, subtiliter haud dense pubescens, pedibus longissimis, antennis parum longis, articulo ultimo fortiter transverso, praecedenti paulo transverso, 9° haud longiori quam latiori; pronoto modice lato, crebre et minute punctato, lateribus ante basin sinuatis, angulis posticis acutis; clytrorum humeris prominentibus; abdomine subtus 6-segmentato:

♂, pedibus longioribus antennarumque articulo ultimo latissimo; segmento ventrali tertio postice leviter bilobato, 4 et 5 abbreviatis:

♀, segmento ventrali 4 abbreviato, 5 paulo producto.

Long. 4 mm.; lat. 2.5 mm.

PHILIPPINE IS., Mindanao: Surigao, Kolambugan, Davao, Butuan, Iligan (*C. S. Baker*).

This is a relatively large and solidly-built insect, the elytra being broad at the shoulders and dilating distinctly to beyond the middle. The legs are very slender and the antennae of an entirely peculiar form. The first three joints are elongate (especially the third), the succeeding six about as long as they are broad, and the last two strongly transverse, the terminal one produced internally, especially in the male (Fig. 9). In the latter sex the third ventral segment is emarginate in the middle and a little produced on each side, and the last three segments are very short. The eyes are also larger and closer together than in the female.